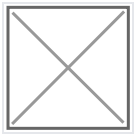
# CD71 Antibody – Mouse

## PRODUCT OVERVIEW

| | |
|---|---|
| **Product Name** | CD71, Antibody |
| **Full Product Name** | Anti-Hu CD71 Purified |
| **Product Gene Name** | anti-CD71 antibody |
| **Product Synonym Gene Name** | TFRC |
| **Product Synonym Names** | transferrin receptor; Transferrin Receptor; TfR1; TfR; TR; Trfr; T9; p90; TFRC |
| **Isotype** | IgG1 |
| **Clone Number** | MEM-189 |
| **Host** | Mouse |
| **Species Reactivity** | Human |
| **Form/Format** | Tris buffered saline (TBS) solution with 15 mM sodium azide |
| **Purity/Purification** | Purified by Protein-A Affinity Chromatography |
| **Concentration** | 1 mg/ml (lot specific) |
| **Specificity** | The antibody MEM-189 reacts with an extracellular epitope on CD71 antigen (transferrin receptor), a 95 kDa type II homodimeric transmembrane glycoprotein expressed on activated B and lymphocytes, macrophages and erythroid precursors; it is lost on resting blood leukocytes. The antibody MEM-189 does not block binding of transferrin to the receptor. |
| **Preparation and Storage** | Store at 2-8 degree C. |
| **OMIM** | 190010 |
| **3D Structure** | ModBase 3D Structure for P02786 |
| **Immunogen** | KG1 human acute myelogenous leukaemia cell line |
| **Applications Tested/Suitable for anti-CD71 antibody** | Western Blot (WB), Flow Cytometry (FC/FACS), Immunoprecipitation (IP) |
| **Application Notes for anti-CD71 antibody** | FC/FACS: QC tested |
| **Related Product Information for anti-CD71 antibody** | CD71 (transferrin receptor) is a type II transmembrane glycoprotein expressed as homodimer in erythroid blood cell line and in activated leukocytes. Upon binding of holotransferrin (complex of transferrin and iron ions), CD71 is internalized by clathrin-mediated endocytosis. Acidification of endosomes by vesicular membrane proton pumps leads to dissociation of iron ions, whereas transferrin (apotransferrin) remains associated with CD71 and recycles to the cell surface, where it is released upon exposure to normal pH. CD71 is also involved in uptake of non-transferrin bound iron. |
| **Other Notes** | Small volumes of anti-CD71 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for CD71 purchase** | MBS1801113 is an antibody targeting CD71. Also known as Anti-Hu CD71 Purified. Reactive in Human. Host: Mouse. |



**Flow Cytometry (FC/FACS) of anti-CD71 antibody**
Separation of K562 cells stained using anti-human CD71 (MEM-189) purified antibody (concentration in sample 4 ug/ml, GAM APC, red) from K562 cells unstained by primary antibody (GAM APC, grey) in flow cytometry analysis (surface staining).

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD71. It may not necessarily be applicable to this product.

| | |
|---|---|
| **NCBI GI #** | 189458819 |
| **NCBI GeneID** | 7037 |
| **NCBI Accession #** | NP_001121620.1 |
| **UniProt Primary Accession #** | P02786 |
| **UniProt Related Accession #** | P02786 |
| **GenBank Nucleotide #** | NP_001121620.1 |
| **NCBI Official Full Name** | transferrin receptor protein 1 isoform 1 |
| **NCBI Official Synonym Full Names** | transferrin receptor |
| **NCBI Official Symbol** | TFRC |
| **NCBI Official Synonym Symbols** | T9; TR; TFR; p90; CD71; TFR1; TRFR; IMD46 |
| **UniProt Protein Name** | Transferrin receptor protein 1 |
| **UniProt Synonym Protein Names** | T9; p90 |
| **UniProt Gene Name** | TFRC |
| **UniProt Synonym Gene Names** | TR; TfR; TfR1; Trfr; sTfR |
| **UniProt Entry Name** | TFR1_HUMAN |
| **NCBI Protein Information** | transferrin receptor protein 1 |
| **NCBI Summary for CD71** | This gene encodes a cell surface receptor necessary for cellular iron uptake by the process of receptor-mediated endocytosis. This receptor is required for erythropoiesis and neurologic development. Multiple alternatively spliced variants have been identified. [provided by RefSeq, Sep 2015] |

| | |
|---|---|
| **UniProt Comments for CD71** | TfR: the transferrin receptor. Regulates the cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied receptors into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system.<br><br>Protein type: Membrane protein, integral; Receptor, misc.; Cell surface<br><br>Chromosomal Location of Human Ortholog: 3q29<br><br>Cellular Component: extracellular space; cell surface; intracellular membrane-bound organelle; integral to plasma membrane; cytoplasmic membrane-bound vesicle; extracellular region; coated pit; recycling endosome; membrane; perinuclear region of cytoplasm; melanosome; plasma membrane; vesicle; endosome; external side of plasma membrane<br><br>Molecular Function: identical protein binding; protein binding; transferrin receptor activity; double-stranded RNA binding<br><br>Biological Process: receptor-mediated endocytosis; viral reproduction; cellular iron ion homeostasis; positive regulation of bone resorption; transferrin transport; osteoclast differentiation; regulation of cell growth; transmembrane transport; regulation of cell proliferation |
| **Research Articles on CD71** | **1.** TfR1 expression (and VEGF) expression was correlated to shorter overall survival in osteosarcoma patients. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |
| **Disclaimer** | While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice.<br><br>It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information. |
| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures.

**MyBioSource** | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-antibody/cd71/1801113